

## A B S T R A C T

Provided is a method of treating or ameliorating certain fibrotic diseases or other indications in an animal, including a human, comprising administering an effective amount of a compound of the formula I:



(I)

wherein:

- a. Ar is a five or six membered heteroaryl ring having a first ring nitrogen and optionally second or third ring nitrogens, with the remaining ring atoms being carbon, oxygen, or sulfur, provided the first nitrogen of Ar is a quaternary nitrogen and Ar is not thiazolium, oxazolium or imidazolium;
- b. Y is substituted on the first ring nitrogen, with the proviso that if Ar is pyrazole, indazole, (1,2,3)-triazole, benzotriazole, or (1,2,4)-triazole, the second ring nitrogen is substituted
- c. Y is:
  1. a group of the formula  $-CH(R^5)-R^6$  [as preferred in one embodiment]
    - (a) wherein  $R^5$  is hydrogen, alkyl-, cycloalkyl-, alkenyl-, alkynyl-, aminoalkyl-, hydroxy[C<sub>1</sub> to C<sub>6</sub>]alkyl, dialkylaminoalkyl-, (N-[C<sub>6</sub> or C<sub>10</sub>]aryl)(N-alkyl)aminoalkyl-, piperidin-1-ylalkyl-, pyrrolidin-1-ylalkyl, azetidinyllalkyl, 4-alkylpiperazin-1-ylalkyl, 4-alkylpiperidin-1-ylalkyl, 4-[C<sub>6</sub> or C<sub>10</sub>]aryl piperazin-1-ylalkyl, 4-[C<sub>6</sub> or C<sub>10</sub>]aryl piperidin-1-ylalkyl, azetidin-1-ylalkyl, morpholin-4-ylalkyl, thiomorpholin-4-ylalkyl, piperazin-1-ylalkyl, piperidin-1-ylalkyl, [C<sub>6</sub> or C<sub>10</sub>]aryl, or independently the same as  $R^6$ ;
    - (b) wherein  $R^6$  is
      - (1) hydrogen, alkyl (which may be substituted by alkoxycarbonyl)-, alkenyl, alkynyl, cyano-, cyanoalkyl-, or  $R_s$ , wherein  $R_s$  is a [C<sub>6</sub> or C<sub>10</sub>]aryl or a heterocycle containing 4-10 ring atoms of which 1-3 are heteroatoms selected from the group consisting of oxygen, nitrogen and sulfur; or
      - (2) a group of the formula  $-W-R^7$  [as preferred in one embodiment], wherein  $R^7$  is alkyl, alkoxy, hydroxy, or  $R_s$  [as preferred in one embodiment], wherein W is  $-C(=O)-$  or  $-S(O)_2-$ ;
      - (3) a group of the formula  $-W-OR^8$  wherein  $R^8$  is hydrogen or alkyl,
      - (4) a group of the formula  $-CH(OH)R_s$ ; or
      - (5) a group of the formula  $-W-N(R^9)R^{10}$ , wherein
        - (a)  $R^9$  is hydrogen and  $R^{10}$  is an alkyl or cycloalkyl, optionally substituted; or
        - (b)  $R^9$  is hydrogen or alkyl and  $R^{10}$  is  $Ar^*$ ; or
        - (c)  $R^9$  is hydrogen or alkyl,  $R^{10}$  is a heterocycle containing 4-10 ring atoms of which 1-3 are heteroatoms are selected from the group consisting of oxygen, nitrogen and sulfur; or
        - (d)  $R^9$  and  $R^{10}$  are both alkyl groups; or
        - (e)  $R^9$  and  $R^{10}$  together with N form a heterocycle containing 4-10 ring atoms which can incorporate up to one additional

heteroatom selected from the group of N, O or S in the ring,  
wherein the heterocycle is optionally substituted; or  
(f)  $R^9$  and  $R^{10}$  are both hydrogen; or

2.  $-NH_2$ , and

- 5 e. X is a pharmaceutically acceptable anion, which may be absent if the compound provides a neutralizing salt, or  
(B) a pharmaceutically acceptable salt of the compound.

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